

ABSTRACT OF THE DISCLOSURE

FREQUENCY DIVIDER WITH FUNNEL STRUCTURE

In a frequency divider enabling the division by N of a frequency F_e and comprising at least one prescaler followed by a division chain, the prescaler has at least one input for the frequency signal F_e to be divided, one input for a command NA of the basic division rank of the prescaler and one input for a command ΔNA coming from the division chain and enabling NA to be made to vary by one unit; the division chain comprises at least one division stage (K) comprising at least one divider by 2, giving a divided frequency $F(K)$, a switch controlled by the divider by 2, the switch having one input for a piece of programming data $R(K)$, one input for the carry signal $RX(K+1)$ of the next stage and one output for the carry signal $RX(K)$ for the previous stage. Application to the field of phase-locked loop frequency synthesis.